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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,501	01/15/2002	John Joseph Cooper	16-080	6798

7590 04/23/2003

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EXAMINER
VANOY, TIMOTHY C

ART UNIT	PAPER NUMBER
1754	6

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-6

Office Action Summary	Application No. 1/031,501	Applicant(s) COOPER
	Examiner VANOY	Group Art Unit 1754

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to ~~communication(s) filed on~~ THE PRELIMINARY AMENDMENT MAILED ON JAN. 15, 2002.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-46 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-46 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

☒ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Atta hment(s)

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Int rvi w Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Pat nt Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing R view, PTO-948

☐ Other _____

Office Acti n Summary

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The person having "ordinary skill in the art" has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this application reasonably reflect this level of skill.

Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Studies on the Hydration of Natural Anhydrite" by Keiichi Murakami et al. in view of Soviet Patent Document No. 345,098 and further in view of U. S. Pat. 5,248,487.

The Murakami et al. reference discloses a method for preparing calcium sulfate dihydrate by adding calcium sulfate anhydrite to a solution containing one of NaCl; NaCl and K-alum; $(NH_4)_2SO_4$; NH_4NO_3 or $NaNO_3$ to obtain a "plaster of paris" (calcium sulfate dihydrate).

The difference between at least the applicants' independent claim and the Murakami et al. reference is that the applicants' claim 1 calls for using a calcium anhydrite that was obtained from dehydrating calcium sulfate dihydrate.

Soviet Patent Document No. 345,098 discloses a method, comprising:

adding calcium sulfate dihydrate to a solution containing calcium chloride and is stirred and heated to 128 °C, and

filtering off calcium sulfate anhydrite from the solution.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made *to utilize* the calcium sulfate anhydrite from any convenient source (such as from the process described in Soviet Patent Document No. 345,098) *as the* calcium sulfate anhydrite described in Murakami et al. reference to make the "plaster of paris" described in the Murakami et al. article, in the manner required by at least the applicants' independent claim 1, *because* the courts have already determined that such selection of a known material (i. e. the calcium sulfate anhydrite of Soviet Patent Document No. 345,098) based on its suitability for its intended use (i. e. as the anhydrite feed material for the process described in Murakami et al.) supports a *prima facie* case of obviousness: please see the discussion of the *Sinclair & Carroll Co. vs. Interchemical Corp.* 325 U. S. 327, 65 USPQ 297 (1945) set forth in section 2144.07 in the MPEP (Feb. 2003).

The limitations set forth in the applicants' dependent claims describing the temperatures, etc. used in the processes are noted, but are not seen to be unobviously

distinct from the those described in Soviet Patent Document No. 345,098 and the Murakami et al. reference.

The difference between the applicants' claims and the Soviet Patent Document 345,098 and the Murakami et al. references is that at least the applicants' dependent claim 5 sets forth that the calcium sulfate dihydrate product (of applicants' claim 1) is calcined to form calcium sulfate hemi-hydrate.

U. S. Pat. 5,248,487 discloses a process for converting calcium sulfate dihydrate into calcium sulfate hemi-hydrate by adding calcium sulfate dihydrate to a salt solution; adding MgCl and KCl to the calcium sulfate dihydrate-containing salt solution; and subjecting this calcium sulfate dihydrate-containing solution to a temperature of 85 to 98 °C for a period of time sufficient to convert calcium sulfate dihydrate into calcium sulfate hemi-hydrate (please see claim 1 in U. S. Pat. 5,248,487).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made *to utilize* the calcium sulfate dihydrate product *resulting from* the process of the Murakami and Soviet Patent Document No. 345,098 references *to make* the calcium sulfate hemi-hydrate product of U. S. Pat. 5,248,487, in the manner set forth in at least the applicants' claim 5, *because* the courts have already determined that such selection of a known material (i. e. the calcium sulfate dihydrate resulting from Murakami et al.) based on its suitability for its intended use (i. e. as the calcium sulfate dihydrate feed material for the process described in U. S. Pat. 5,248,487) supports a *prima facie* case of obviousness: please see the discussion of the *Sinclair & Carroll Co.*

vs. Interchemical Corp. 325 U. S. 327, 65 USPQ 297 (1945) set forth in section 2144.07 in the MPEP (Feb. 2003).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy C. Vanoy whose telephone number is 703-308-2540. The examiner can normally be reached on 8 hr. days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Timothy Vanoy/tv
April 16, 2003

Timothy Vanoy
Patent Examiner
Art Unit 1754